

**SAN FRANCISCO PUBLIC UTILITIES COMMISSION  
INFRASTRUCTURE  
CONSTRUCTION MANAGEMENT PROCEDURES**

**SECTION: SFPUC INFRASTRUCTURE  
CONSTRUCTION MANAGEMENT**

**APPROVED:**



**PROCEDURE NO: 009**

**DATE: 6/7/2019**

**TITLE: VALUE ENGINEERING CHANGE  
PROPOSAL (VECP)**

**REVISION: 1**

**1.0 Policy**

A Contractor's Value Engineering Change Proposal (VECP) is a proposal to modify the plans, specifications or other requirements of the Contract Documents relating to an Item, type of construction or process for Work that results in reduced construction costs and still maintains the quality required by the Contract Documents. The City shall be the sole judge of the acceptability of a VECP and of the estimated net savings in construction costs from the adoption of all or any part of a VECP. The City will share with the Contractor the net cost savings that result from an approved VECP. The approval of a Final VECP requires the processing of a Change Order modifying the provisions of the Contract. Therefore, VECPs shall be carefully considered and reviewed in a technically sound manner in conformance with this procedure utilizing the CMIS. The City shall respond to the Contractor's VECP within 30 days of receipt of the VECP.

This SFPUC Infrastructure Construction Management (CM) Procedure applies to all personnel working on SFPUC Infrastructure Projects during construction to the extent that their work is affected by this CM Procedure and does not conflict with specific SFPUC policies or the Contract under which the Work is executed.

**2.0 Description**

This SFPUC Infrastructure CM Procedure establishes the requirements for the submittal, process, control, coordination of review and response, and retention of Contractor VECPs. Technical Specification Section 01 24 13 Value Engineering discusses the requirements and information to be included in a VECP as

determined by the Project Engineer. This CM Procedure describes the processing of a VECP from its original submittal by the Contractor and receipt by the RE through the review, response, and subsequent forwarding of the response to the Contractor.

### **3.0 Definitions**

#### **3.1 Value Engineering Change Proposal (VECP)**

A VECP is a document submitted by the Contractor that requests a modification of the plans, specifications or other requirements of the Contract Documents relating to an Item, type of construction or process of Work that results in reduced construction costs without affecting the quality required by the contract. The requirements and information to be included in a VECP are identified in the Contract Documents.

#### **3.2 Conceptual Value Engineering Change Proposal**

A Conceptual VECP is an abbreviated VECP for preliminary review by the City which reduces the risk of subsequent rejection of a Final VECP by the City, but which does not commit the City to eventual approval of the Final VECP. A Conceptual VECP provides a general description of the proposed modification, conceptual plans and description of proposed changes, and an estimate of cost/time savings.

#### **3.3 Final Value Engineering Change Proposal**

A Final VECP is a full submittal of a VECP containing a detailed description of the proposed change, the difference between the proposed change and the Contract requirements, and the advantages and disadvantages of each; an itemization of all Contract documents requiring change as a result of the proposed change; design calculations if deemed appropriate by the City; comparisons of cost and schedule impacts; descriptions of previous use of the proposed changes with conditions and results; and, if required by the City, a statement of life cycle costs.

#### **3.4 Construction Management Information System (CMIS)**

The CMIS is an on-line management tool for the processing of contract documents based on established SFPUC Infrastructure CM Business Processes. It serves as a tool for effective storage and retrieval of various documents generated during a construction project. Contractor VECP submittals and associated RE responses should be entered directly into the CMIS.

## **4.0 Responsibilities**

### **4.1 Contractor**

The Contractor generates a VECP in CMIS, addressing it to the attention of the RE. The Contractor shall provide supporting documentation in accordance with the Contract Documents and this CM Procedure that is pertinent to the understanding of the request and obtaining a carefully considered response. The Contractor may submit a Conceptual VECP for the City's consideration prior to the submittal of a Final VECP. Acceptance of a Final VECP by the City obligates the Contractor to submit a Change Order Request (COR) within 5 working days of notification of City acceptance.

### **4.2 Resident Engineer (RE)**

The RE is the single point of contact with the Contractor and is the designated "City Representative" as defined by the Contract Documents. The RE is responsible for timely and efficient management of VECPs and for either approving or rejecting a VECP and transmitting the response to the Contractor. The acceptance, review and approval or rejection are at the sole judgment of the RE. The RE may, with the concurrence of the Contractor, propose modifications to the VECP in order to enhance it or make it more acceptable.

### **4.3 Office Engineer (OE)**

The OE is responsible for processing the VECP using CMIS, assigning the file code, determining the routing of a VECP within the CM team, EMB and/or Design Consultant, tracking VECP reviews to ensure timely response, and addressing all comments on the status of a VECP. The OE has the authority to reject and return a VECP to the Contractor through the RE if it is non-compliant with the Contract Documents. The OE checks responses to VECPs for completeness, and obtains additional clarification or revision from the reviewer where deemed needed.

### **4.4 Primary Reviewer**

Each VECP will have one Primary Reviewer who is responsible for the review, including obtaining input from other member(s) of the CM team as necessary and preparing a coordinated single response. Reviewers will give VECPs priority in their daily schedule and make every effort to respond in a timely manner.

### **4.5 Administrative/Document Control Specialist (ADCS)**

The ADCS files Submittals according to the Standard Project Filing System in the CMIS. For smaller projects, the OE or other CM team member designated by the RE can perform the role of the ADCS.

## **5.0 Implementation**

**5.1** The Contractor prepares the VECP on Contractor company letterhead with all required statements, estimates, narratives and other documentation in accordance with the Contract Documents. The Contractor enters VECP data directly into the CMIS, referencing the pertinent Contract Documents, specification section, and/or drawing number. The Contractor enters a narrative description (a general description if the VECP is “Conceptual”, a detailed description if the VECP is “Final”) of the proposed change. The Contractor enters the following information:

- Statement that the proposal is submitted as a Conceptual or as a Final VECP, as appropriate for the type of VECP.
- General or detailed narrative description of the difference between the proposed change and the existing Contract requirements and the advantages and disadvantages of each, as appropriate for the type of VECP.
- A list and analysis of Contract requirements that would change if the VECP is accepted, including suggested revisions to specifications
- General description of changes to plans, drawings and specifications, with references to attached documents that provide appropriate details, including conceptual plans or marked-up drawings.
- Estimate or sum of cost savings and impact on the Baseline Critical Path Method (CPM) Schedule and, for Final VECPs, a reference to an attached document that provides an appropriate detailed cost comparison.
- Information regarding previous use, including:
  - Description of the project
  - Date of the project, installation, and use
  - Description of testing and results
  - If a City project, include Contract No., date and City action
  - Contact information
- A statement of the time by which a response is required for a Conceptual VECP and the time required to prepare a Final VECP, or the time by which a Change Order should be executed for maximum cost savings for a Final VECP and the date when a final response from the City regarding the VECP is required to avoid delays.

The Contractor shall attach documents that provide detailed documentation in accordance with the Contract Documents, as appropriate to the type of VECP, including:

- Waiver of restriction in City use or disclosure
- Agreement not to hold the City liable for acceptability or attributable delays
- Estimate or detailed cost comparison of methods proposed in the VECP to the original Work
- Effect of the VECP on the Baseline CPM Construction Schedule
- If deemed appropriate by the City, design calculations and statement of life cycle costs

Attached electronic documents shall be in the latest version of Adobe Acrobat Pro.

The Contractor may request in writing, concurrent with the submittal of the VECP, that the City return information pertinent to the VECP if the City rejects the VECP.

- 5.2** The OE assigns a file code in accordance with SFPUC Infrastructure CM Procedure No. 003, Project Documents and Correspondence Control to ensure consistency as much as possible between all SFPUC Infrastructure projects. The OE reviews the VECP for completeness and conformance to the requirements of the Contract Documents, and notifies the ADCS of the receipt of the VECP.
- 5.3** If the VECP is non-compliant, the OE sets the Status to Rejected, forwards the action to the ADCS, and returns it to the Contractor, including the RE and ADCS as recipients. The OE enters instructions for rectifying the non-compliance and for resubmittal.
- 5.4** If the VECP is compliant, the OE determines the Primary Reviewer and anticipated response date and uses the CMIS to forward the VECP to the RE for review.
- 5.5** The RE, as the City Representative, is responsible for determining if a VECP qualifies for consideration and may reject any VECP that:
  - requires excessive time to evaluate
  - does not generate sufficient cost savings to warrant review
  - is not consistent with the City's design, criteria or schedule for the project
  - is similar to a change in plans or specifications that is under consideration by the City

- is based on or is similar to standard specifications, special provisions or plans adopted by the City after Contract advertisement
  - proposes changes implied on submittals without the Contractor's formal request
  - impairs, in any manner, the essential functions or characteristics of the Project
  - addresses Work that has been started, installed or completed and does not meet requirements in the Contract Documents
  - is requested directly by a Subcontractor or Supplier
  - only proposes reducing or eliminating Contract pay items
  - proposes changes for which equivalent options are already provided for in the Contract
  - does not contain or comply with the elements and codes and standards required by the specification
- 5.6** The RE reviews the VECP, coordinates with the Contractor to request additional information needed to evaluate the VECP or to obtain concurrence to modify the VECP, if necessary, and accepts or rejects the VECP.
- 5.7** If the VECP is rejected, the RE transmits the rejected VECP to the Contractor, using CMIS. This rejection is final and the Contractor may not appeal or claim additional costs or delays resulting from the rejection or untimely acceptance of a VECP. In compliance with the Contractor's previous request, the OE and ADCS coordinate to return to the Contractor all information pertinent to the rejected VECP.
- 5.8** If the VECP is accepted or rejected, the RE shall notify the Contractor of acceptance or rejection within 30 days of receipt of the VECP.
- 5.9** If the VECP is accepted, the OE determines who the Primary Reviewer is, and forwards the action to him. The OE shall monitor the progress of the VECP's review.
- 5.10** CM team members will perform the initial review if it is determined by the OE that the VECP can be addressed in the field. If necessary, the VECP shall be sent to others for review. Non-technical VECPs will be reviewed by the appropriate project staff and technical VECPs that affect the design will be reviewed by the PE who will coordinate with SFPUC EMB design staff and/or the Design Consultant. The Primary Reviewer is expected to obtain additional review assistance as required from other project staff and compile one comprehensive response.
- 5.11** The OE reviews the response from the Primary Reviewer and, if necessary, returns the response to the Reviewer. The OE will also determine the notification distribution list. Upon satisfactory completion of

the response, the OE forwards the response to the RE for approval or modification and transmittal to the Contractor.

- 5.12** The RE verifies the response, determines if the VECP should be approved and transmits the response to the Contractor. The RE may modify the response before transmitting it to the Contractor.
- 5.13** The ADCS attaches necessary electronic files, prints and files hardcopy documents if required, and sends notifications to parties named on the distribution list which shall always list the PM and PE.
- 5.14** If the approved VECP is a Conceptual VECP, the Contractor initiates a Final VECP as described in Paragraph 5.1. If the approved VECP is a Final VECP, the RE includes in the response the instruction to initiate a COR within 5 working days.
- 5.15** The Contractor shall continue to perform the Work in accordance with the requirements of the Contract Documents until a Change Order incorporating the VECP has been approved. If the Change Order has not been approved by the date specified by the VECP, the VECP shall be deemed rejected unless the decision date has been extended by mutual agreement of the parties.

## **6.0 Other Procedural Requirements**

- 6.1** Subsequent to an approved Final VECP, a Change Order Request (COR) shall be submitted by the Contractor in accordance with the Contract Documents and the process described in SFPUC Infrastructure CM Procedure No. 011, Construction Change Management. The COR and resulting Change Order shall specifically state that the Change Order will be executed pursuant to Value Engineering Specification Section 01 24 13 so that the City may track the cost savings. Net savings shall be shared equally by the City and Contractor, and the Contractor shall be paid its 50 percent share when the City has accepted the Work attributable to the VECP.

## **7.0 References**

### **7.1 Technical Specifications**

Section 01 24 13 Value Engineering

### **7.2 SFPUC Infrastructure CM Procedures**

No. 003 Project Documents and Correspondence Control

No. 011 Construction Change Management

### **7.3    Others**

NONE

### **8.0    Attachments**

- 009 - 1        Value Engineering Change Proposal (VECP) - Form
- 009 – 2        Value Engineering Change Proposal (VECP) Log
- 009 - 3        Value Engineering Request and Answer Log
- 009 - 4        Revision Control Log



**ATTACHMENT 009 - 1**  
**VALUE ENGINEERING CHANGE (VECP) - Form**

| Create Value Engineering Change Form                                                                                                                                                                                                                                                                                                                                                                                                       |                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <u>Value Engineering Change Form</u>                                                                                                                                                                                                                                                                                                                                                                                                       |                                                           |
| Contract Name: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                   | Date: <input style="width: 100%;" type="text"/>           |
| Contract Number: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                 | VECP Type: <input style="width: 100%;" type="text"/>      |
| Submitted By: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                    | Date Submitted: <input style="width: 100%;" type="text"/> |
| Submitted To: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                    | Priority: <input style="width: 100%;" type="text"/>       |
| Contract Section: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                |                                                           |
| Details: <div style="border: 1px solid black; height: 60px; margin-top: 5px;"></div>                                                                                                                                                                                                                                                                                                                                                       |                                                           |
| List Hardcopy Documents: <div style="border: 1px solid black; height: 30px; margin-top: 5px;"></div>                                                                                                                                                                                                                                                                                                                                       |                                                           |
| List Attachments: <div style="border: 1px solid black; height: 50px; margin-top: 5px;"></div>                                                                                                                                                                                                                                                                                                                                              |                                                           |
| Impacts: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                         |                                                           |
| Reviewed By: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |
| Response: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
| <div style="display: flex; justify-content: space-between;"><div style="width: 60%;"><div style="border-bottom: 1px solid black; margin-bottom: 5px; height: 1.2em;"></div><div style="text-align: center;">Resident Engineer's Signature</div></div><div style="width: 35%; text-align: right;"><div>Response Code: <input style="width: 100%;" type="text"/></div><div>Date: <input style="width: 100%;" type="text"/></div></div></div> |                                                           |
| Distribution:                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                           |
| Company Name: <input style="width: 100%;" type="text"/>                                                                                                                                                                                                                                                                                                                                                                                    | Contract Name: <input style="width: 100%;" type="text"/>  |

# **ATTACHMENT 009 - 2** **VALUE ENGINEERING CHANGE PROPOSAL (VECP) LOG**

| Create Value Engineering Change Proposal (VECP) Log |       |                      |          |                 |                       |                 |                    |                         |                         |        |                  |           |
|-----------------------------------------------------|-------|----------------------|----------|-----------------|-----------------------|-----------------|--------------------|-------------------------|-------------------------|--------|------------------|-----------|
| <u>Value Engineering Change Proposal (VECP) Log</u> |       |                      |          |                 |                       |                 |                    |                         |                         |        |                  |           |
| Contract Name:                                      |       | <input type="text"/> |          |                 |                       |                 | Date:              |                         | <input type="text"/>    |        |                  |           |
| Contract Number:                                    |       | <input type="text"/> |          |                 |                       |                 |                    |                         |                         |        |                  |           |
| Number                                              | Title | Type                 | Priority | (A)<br>Received | (B)<br>To<br>Reviewer | (C)<br>Reviewed | (D)<br>OE Reviewer | (E)<br>To<br>Contractor | (F)<br>Required<br>Date | Status | Distribute<br>To | Completed |
|                                                     |       |                      |          |                 |                       |                 |                    |                         |                         |        |                  |           |

# **ATTACHMENT 009 - 3** **VALUE ENGINEERING REQUEST AND ANSWER LOG**

| Create Value Engineering Request and Answer Log |       |                                            |          |                 |                       |                 |                    |                         |                                            |        |                  |           |
|-------------------------------------------------|-------|--------------------------------------------|----------|-----------------|-----------------------|-----------------|--------------------|-------------------------|--------------------------------------------|--------|------------------|-----------|
| <u>Value Engineering Request and Answer Log</u> |       |                                            |          |                 |                       |                 |                    |                         |                                            |        |                  |           |
| Contract Name:                                  |       | <input style="width: 150px;" type="text"/> |          |                 |                       |                 | Date:              |                         | <input style="width: 100px;" type="text"/> |        |                  |           |
| Contract Number:                                |       | <input style="width: 170px;" type="text"/> |          |                 |                       |                 |                    |                         |                                            |        |                  |           |
| Number                                          | Title | Type                                       | Priority | (A)<br>Received | (B)<br>To<br>Reviewer | (C)<br>Reviewed | (D)<br>OE Reviewer | (E)<br>To<br>Contractor | (F)<br>Required<br>Date                    | Status | Distribute<br>To | Completed |
|                                                 |       |                                            |          |                 |                       |                 |                    |                         |                                            |        |                  |           |

**ATTACHMENT 009 - 4**  
**REVISION CONTROL LOG**

| Revision No. | Revision Date | What changed?                                                                                                                                   |
|--------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Rev 1        | 6/7/19        | <ul style="list-style-type: none"><li>• Minor format changes</li><li>• Attachments - revised</li><li>• Revision Control Log - updated</li></ul> |
| Rev 0        | 11/14/16      | Signed                                                                                                                                          |
|              |               |                                                                                                                                                 |